



IUPUI

**SCHOOL OF INFORMATICS
AND COMPUTING**

DEPARTMENT OF HUMAN-CENTERED COMPUTING

Indiana University–Purdue University
Indianapolis

NEWM N542

Advanced 3D Animation Techniques

**Department of Human-Centered Computing, Media Arts and Science Program
Indiana University School of Informatics and Computing, Indianapolis
Spring 2017**

Section No.: 14040 *Credit Hours:* 3

Day/Time:

Location: IT 255, Informatics & Communications Technology Complex
535 West Michigan Street, Indianapolis, IN 46202 [\[map\]](#)

First Class:

Instructor: Zebulun M. Wood, MS in Technology, Lecturer

Office Hours: by appointment only

Office: IT 463

Phone: 317-278-4140 (Office)

Email: zwood@iupui.edu

COURSE DESCRIPTION

This course covers the theory and practice of 3D character animation, including development, reference, and acting. It applies advanced rigging principles to animations in industry pipelines for film and computer games. Topics include story development, facial and body dynamics, and motion capture. Students perform a literature review, peer critique, and reference collection.

Required Text:

The Animator's Survival Kit

Richard Williams

Publisher: Faber & Faber; 1st edition (January 7, 2002)

ISBN-10: 0571202284; ISBN-13: 978-0571202287

Stop Staring: Facial Modeling and Animation Done Right

Jason Osipa

Publisher: Sybex; 3rd edition (October 12, 2010)

ISBN-10: 0470609907; ISBN-13: 978-0470609903

Supplementary Text:

Author: Digital Tutors/Gnomon

12 month membership, \$70

Equipment needed:

- <http://www.box.iu.edu> for file sharing

Software used:

Autodesk Maya
 Autodesk Matchmover
 Autodesk Motion Builder
 Unreal or Unity
 Adobe Production Suite

Course Objectives:

Students will develop concepts from completed storyboards and edited reference video. Their concepts will be sketched on storyboards and their production flow will be documented in a conceptual paper that defines your respective approach. Throughout the course, students will be critiquing and evaluating the processes and execution of animation. While animating, students will be exposed to traditional methods of criticism and identify their personal workflow that best fits their needs.

STUDENT LEARNING OUTCOMES

Upon completion of this course, students will	RBT	PGPL	Assessments
1. Examine the application of the 12 principles of animation to 3D character animation, motion capture, and digital performance.	4	1	Assignment 1–6
2. Gather and critique quality reference material for 3D animation.	5	2	Assignment 1–11
3. Analyze 3D animation procedures that work across all 3D software platforms.	4	2	Assignment 1–11
4. Apply advanced rigging, animation, gesture, emotional, and facial techniques within a digital character.	3	1	Assignment 1–7, Midterm
5. Critique, evaluate, and recommend solutions for effective and rigging and animation.	5	2	Assignment 1–11
6. Develop production and portfolio quality simulations that deliver advanced aesthetics and demonstrate mastery of 3D production workflow.	6	3	Midterm, Final
7. Create and deliver cinematic, gaming, and VFX quality animations and simulations to meet the needs of their respective industries.	6	3	Midterm, Final
8. Research, propose, and predict applications of 3D character animation, motion capture, and digital performance beyond entertainment.	5	2	Midterm, Final, Presentation

RBT: Revised Bloom's Taxonomy; PGPL: Principles of Graduate and Professional Learning

Principles of Graduate and Professional Learning (PGPL)

Learning outcomes are assessed in the following areas:

1. Knowledge and skills mastery (K&S) *Moderate emphasis*
2. Critical thinking and good judgment (CT) *Major emphasis*
3. Effective communication (EC) *Some emphasis*
4. Ethical behavior (EB)

EXPECTATIONS, GUIDELINES, AND POLICIES

Attendance:

For success in this class students are expected to attend each class session. Missed classes are only allowed if notice is given a full week in advance. This class has a stringent attendance policy of 1 dropped letter grade for each 2 classes missed. I will take attendance at the beginning of each class.

Incomplete:

The instructor may assign an Incomplete (I) grade only if at least 75% of the required coursework has been completed at passing quality and holding you to previously established time limits would result in unjust hardship to you. All unfinished work must be completed by the date set by the instructor. Left unchanged, an Incomplete automatically becomes an F after one year. <http://registrar.iupui.edu/incomp.html>

Deliverables:

You are responsible for completing each deliverable (e.g., assignment, quiz) by its deadline and submitting it by the specified method. Deadlines are outlined in the syllabus or in supplementary documents accessible through OnCourse. Should you miss a class, you are still responsible for completing the deliverable and for finding out what was covered in class, including any new or modified deliverable. In fairness to the instructor and students who completed their work on time, no grade will be given on a deliverable, if it is submitted late, the material will still be reviewed and/or critiqued.

Exams/quizzes:

There are no exams or quizzes

Lab assignments:

Class tutorials and demos must be completed along with the instructor. Failure to do so can result in a detrimental effect on overall quality of work and trend in lower scores.

Class assignments:

Class assignments/projects must be finished and handed in on time. If you can't get in an assignment before class, email it to me, and upload and message it via OnCourse.

Students are expected to achieve exemplary results in all assignments, expected to lead in class critique, and to participate in assisting others and critiquing their work in the class.

Final projects will not be accepted late.

Grading Information:

- Projects, papers, Class Participation determine grades weekly
- Professionalism is graded over the entirety of the course and includes participation (attitude, in-class critiques and questions, on-time deliverable(s). presentation quality)
- Grades will be returned along with critique no later than 2 weeks after assignment turn in.

Tentative WEEKLY SCHEDULE based on class progress ,

NOTE : Character rigging and animation critique, lecture/demos, and assignments will run in parallel all semester, topics on schedule will all be addressed but may vary widely due to new timeline versus previous iterations of course.

Week 1

Introduction to class: syllabus

View prior class projects

Projects Overview – team based projects or individual

LECTURE/DEMO – Animation Pipeline – Rigs, Reference, Animation

LAB – Maya, Simple Rigs and Blocked Animation

ASSIGNMENT – Draw out 6 main poses of a 3 second animation then Block 72 frames of animation using at least 6 strong poses.

Week 2

CRITIQUE

LECTURE/DEMO – Parenting, Grouping, Joint, FK/IK Animation, Skinning Geometry Principles of Animation

LAB – Simple Rigs, Blocked, and Blocking Plus Animation

ASSIGNMENT – Draw out 6 main poses of a 3 second animation then Block 72 frames of animation using at least 6 strong poses, Refine in between poses totaling 12 poses, incorporate Appropriate Staging, Follow through, anticipation, and any secondary action.
Add to joints, IK's, and practice skinning your character

Week 3

CRITIQUE

LECTURE/DEMO – Constraints, Set Driven Keys and Application, Clever Parenting and Grouping, review Skinning
Introduce Curve editor, viewing/refining data

LAB

ASSIGNMENT – Implement constraints and set driven keys into rigs, re-skin

Draw out 6 main poses of a 3 second animation then Block 72 frames of animation using at least 6 strong poses, Refine in between poses totaling 12 poses, Incorporate Appropriate Staging, Follow through, anticipation, and any secondary action, Arcs, and Exaggeration this week.

Begin reference gathering and setup of stylistic character performance, body movement only

Week 4

CRITIQUE

LECTURE/DEMO – Review a few rigs, Introduce Blend Shapes, Eye Rigs, and corrective Blend Shapes

LAB

ASSIGNMENT – Implement blend shapes, eye rigs, and corrective blend shapes, re-skin/edit skinning

Draw out 6 main poses of a 3 second animation then Block 72 frames of animation using at least 6 strong poses, Refine in between poses totaling 12 poses, Incorporate Appropriate Staging, Follow through, anticipation, and any secondary action, Arcs, and Exaggeration this week.

Continue reference gathering and setup of stylistic character performance, body movement only, begin creating thumbnails and acting out a 6 second performance

Week 5

CRITIQUE

LECTURE/DEMO – Introduce Influence Objects, Joint Facial Rigging, GUI Set-Ups, Global Scalable RIG Set Ups

LAB

ASSIGNMENT – Implement Influence objects, Joint Facial Rigs, and/or Facial GUI

Draw out 6 main poses of a 3 second animation then Block 72 frames of animation using at least 6 strong poses, Refine in between poses totaling 12 poses, Incorporate Appropriate Staging, Follow through, anticipation, and any secondary action, Arcs, and Exaggeration this week.

Begin stylistic character performance, body movement only, refine thumbnails and begin blocking and acting out a 6 second performance in Maya

Week 6

CRITIQUE

LECTURE/DEMO – Review Rigs, Refine and polish, review animation planning and blocking

LAB

ASSIGNMENT – Refine RIG, and anything you would like to add
 Draw out 6 main poses of a 3 second animation then Block 72 frames of animation using at least 6 strong poses, Refine in between poses totaling 12 poses, incorporate All Animation Principles.

Continue stylistic character performance, body movement only, begin blocking plus and acting out a 6 second performance in Maya

Week 7

CRITIQUE

LECTURE/DEMO – Work day, Continue to Block and Block plus body performances.

LAB

ASSIGNMENT – Refine RIG, and anything you would like to add
 Draw out 6 main poses of a 3 second animation then Block 72 frames of animation using at least 6 strong poses, Refine in between poses totaling 12 poses, Incorporate All Animation Principles

Continue stylistic character performance, body movement only, refine blocking plus and acting out a 6 second performance in Maya

Week 8

CRITIQUE

LECTURE/DEMO – Review first set of animations from several weeks, introduce splining and refining phases of animation

LAB

ASSIGNMENT – Character Walk Cycle
 Draw out main poses of a loop able walk cycle animation then Block, and refine the frames of animation Incorporate All Animation Principles.

Week 9

CRITIQUE

LECTURE/DEMO – Review first set of animations from several weeks, introduce splining and refining phases of animation, Introduce animation layers

LAB

ASSIGNMENT – Nontraditional Walk Cycle – Draw out main poses of a loop able walk cycle animation then Block, and refine the frames of animation Incorporate All Animation Principles.

Week 10

CRITIQUE

LECTURE/DEMO – Character Emotional Animation, Psychology of the face, Anatomy, Emotions and Physiology

LAB

ASSIGNMENT – Facial Performance – Draw out and act out main action of an emotional clip of audio, then Block, and refine the frames of animation Incorporate All Animation Principles

Week 11

CRITIQUE

LECTURE/DEMO – review current facial animations

LAB

ASSIGNMENT – Facial Performance – Draw out and act out main action of an emotional clip of audio, then Block, and refine, and polish the frames of animation
Incorporate All Animation Principles

Week 12

CRITIQUE

LECTURE/DEMO – Scripts, Cheats, and Best Practices, GUEST SPEAKER

LAB

ASSIGNMENT – Begin Final Performance Planning, thumbnail, record, and gather reference for the final animation, begin blocking phases

Graduate Research Assignment Literature review:

Choose one of the following problems to research, implement (proof), and present in the final weeks of the course:

1. *Creating script based GUI's using Python or Melscript*
2. *Implementing Clothing and Hair Dynamics after Character Animation*
3. *Using Motion Capture Data to create foundational animations for both Maya and Game engines with Motion Builder*
4. *Implement Muscle Based Dynamics into Rigs inside of Maya*

Week 13

CRITIQUE

LECTURE/DEMO – Review Animations, Introduction to Dynamics Implementation

LAB

ASSIGNMENT Facial Animation

Week 14

CRITIQUE

LECTURE/DEMO – Continue Dynamics discussion by request, MOCAP Implementation

LAB

ASSIGNMENT Final Performance Animation, continue blocking phases, move into blocking plus

Week 15**CRITIQUE**

LECTURE/DEMO – Continue Dynamics discussion by request, MOCAP Implementation
LAB

ASSIGNMENT Final Performance Animation, continue refining and polishing animation

Week 16

Present final Animation in play blast/render including audio from performance.

Grading Information:**Weekly Assignments**

All assignments are to be delivered in a folder with your name, class , and week titled, if the assignment is Maya based; with Maya project folders, and will be evaluated through Canvas within the week.

Each weekly assignment is worth 50 points each.

Weekly assignments will consist of certain body parts and beginning to develop an appreciation of how the body works and moves. Students will learn to see, be patient, and develop a strong sense of foundations in proportion and anatomy and kinesiology.

Presentation Topic – This is your presentation on any given topic related to animation, rigging, or motion capture. You must show your tests, research, and successful implementation of research in an effective presentation. Worth 100 pts
Final Project Milestone is a final assessment of your ability to understand and implement the practices learned each week and is worth 400 points.

- 100 body mechanic animations to polish phase
- 100 facial animation polish
- 100 points for rig completed
- 100 Animation Reel & Rigging Reel

Professionalism & Critique (600 pts)

Professionalism is the highest quality a student of industry can gain and respect. Discussion, critique, and betterment of your peers will mirror ‘dailies’ in the industry through Canvas based discussion forums. We are all adults, the following are areas in which we will earn or lower your grade over the 16 weeks of class.

- Contributing and requesting of Critiques in and out of class

Assignments

	Due Date	Rubric/Assessment	Points
Assignment 1	Week 2	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 2	Week 3	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 3	Week 4	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 4	Week 5	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 5	Week 6	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 6	Week 7	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 7	Week 8	Progress on Rig/Animation, Quality of Reference/Planning Used	100
Assignment 8	Week 9	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 9	Week 10	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 10	Week 11	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 11	Week 12	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 12	Week 13	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 14	Week 14	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Assignment 14	Week 15	Progress on Rig/Animation, Quality of Reference/Planning Used	50
Presentation	Week 15	Depth of Research, Ease of Replication and Implementation, Presentation of Theory	100

Final	Week 16	Present Final Animation	400
Semester Critique	Week 16	Quality/consistence of weekly critiques	600

Grading Scale:

A+	97–100%	Professional level work, showing highest level of achievement
A	93–96.99%	Extraordinarily high achievement, quality of work; shows command of the subject matter
A–	90–92.99%	Excellent and thorough knowledge of the subject matter
B+	87–89.99%	Above average understanding of material and quality of work
B	83–86.99%	Mastery and fulfillment of all course requirements; good, acceptable work
B–	80–82.99%	Satisfactory quality of work
C+	77–79.99%	Modestly acceptable performance and quality of work
C	73–76.99%	Minimally acceptable performance and quality of work
C–	70–72.99%	Unacceptable work (Core course must be repeated for credit)
D+	67–69.99%	Unacceptable work (Course must be repeated for credit)
D	63–66.99%	Unacceptable work
D–	60–62.99%	Unacceptable work
F	Below 60	Unacceptable work

No credits are granted for a grade below C.

Grading Standards

A – Outstanding, high quality work.

- A fully completed project that demonstrates mastery of skills.
- Projects that display creative and sometimes innovative work.
- The students created many sketches and investigated several options before choosing one.
- Combinations of color schemes, space, and image layout were used effectively and chosen carefully for final project.

B – Good to very good work.

- The student completed the components of the project, but neglected to experiment with additional or more challenging technical approaches.
- The work demonstrates good abilities in the respective new media applications, but may lack depth and level of skill.

- Space was filled adequately and a few combinations of design were tried.
- The project could be lacking in areas of design, planning, or technical approach.

C – Average work.

- The work demonstrates average skills in depth, design, and application.
- No more than what was required of the course was completed.
- The work is possibly incomplete in parts or used the wrong file extension on handed in projects.

D – Below average work.

- The work is largely incomplete and displays a lack of effort.
- Very little time was put into the software and thusly resulted in poor quality work.
- The files handed in had errors or were unable to be downloaded.

F – Failure to complete the objectives of the course.

I - Incomplete

Students are expected to complete their work in the allotted time of this session. However, because of unforeseen hardships students may not be able to complete the project in the time established for completion of his/her work. To receive a grade of Incomplete you must have 75% of the course work completed at a passing level.

CODE OF CONDUCT

All students should aspire to the highest standards of academic integrity. Using another student's work on an assignment, cheating on a test, not quoting or citing references correctly, or any other form of dishonesty or plagiarism shall result in a grade of zero on the item and possibly an F in the course. Incidences of academic misconduct shall be referred to the Department Chair and repeated violations shall result in dismissal from the program.

All students are responsible for reading, understanding, and applying the *Code of Student Rights, Responsibilities and Conduct* and in particular the section on academic misconduct. Refer to *The Code > Responsibilities > Academic Misconduct* at <http://www.indiana.edu/~code/>. All students must also successfully complete the Indiana University Department of Education "How to Recognize Plagiarism" Tutorial and Test. <https://www.indiana.edu/~istd> You must document the difference between your writing and that of others. Use quotation marks in addition to a citation, page number, and reference whenever writing someone else's words (e.g., following the *Publication Manual of the American Psychological Association*). To detect plagiarism instructors apply a range of methods, including Turnitin.com. <http://www.ulib.iupui.edu/libinfo/turnitin>

Academic Misconduct:

1. **Cheating:** Cheating is considered to be an attempt to use or provide unauthorized

assistance, materials, information, or study aids in any form and in any academic exercise or environment.

- a. A student must not use external assistance on any “in-class” or “take-home” examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, calculators, computers, and wireless communication devices.
 - b. A student must not use another person as a substitute in the taking of an examination or quiz, nor allow other persons to conduct research or to prepare work, without advanced authorization from the instructor to whom the work is being submitted.
 - c. A student must not use materials from a commercial term paper company, files of papers prepared by other persons, or submit documents found on the Internet.
 - d. A student must not collaborate with other persons on a particular project and submit a copy of a written report that is represented explicitly or implicitly as the student’s individual work.
 - e. A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on fieldwork.
 - f. A student must not steal examinations or other course materials, including but not limited to, physical copies and photographic or electronic images.
 - g. A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor or program to whom the work is being submitted.
 - h. A student must not, without authorization, alter a grade or score in any way, nor alter answers on a returned exam or assignment for credit.
2. **Fabrication:** A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citation to the sources of information.
 3. **Plagiarism:** Plagiarism is defined as presenting someone else’s work, including the work of other students, as one’s own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered “common knowledge” may differ from course to course.
 - a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.
 - b. A student must give credit to the originality of others and acknowledge indebtedness whenever:
 1. directly quoting another person’s actual words, whether oral or written;
 2. using another person’s ideas, opinions, or theories;
 3. paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
 4. borrowing facts, statistics, or illustrative material; or

5. offering materials assembled or collected by others in the form of projects or collections without acknowledgment
4. **Interference:** A student must not steal, change, destroy, or impede another student's work, nor should the student unjustly attempt, through a bribe, a promise of favors or threats, to affect any student's grade or the evaluation of academic performance. Impeding another student's work includes, but is not limited to, the theft, defacement, or mutilation of resources so as to deprive others of the information they contain.
5. **Violation of Course Rules:** A student must not violate course rules established by a department, the course syllabus, verbal or written instructions, or the course materials that are rationally related to the content of the course or to the enhancement of the learning process in the course.
6. **Facilitating Academic Dishonesty:** A student must not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct, nor allow another student to use his or her work or resources to commit an act of misconduct.

OTHER POLICIES

1. **Administrative withdrawal:** Students must participate in all class discussions and conscientiously complete all required course activities and/or assignments. If a student is unable to attend, participate in, or complete an assignment on time, the student must inform the instructor. If a student misses more than half of the required activities within the first 25% of the course without contacting the instructor, the student may be administratively withdrawn from this course. Administrative withdrawal may have academic, financial, and financial aid implications. Administrative withdrawal occurs after the full refund period, and a student who has been administratively withdrawn is ineligible for a tuition refund.
2. **Civility:** To maintain an effective and inclusive learning environment, it is important to be an attentive and respectful participant in lectures, discussions, group work, and other classroom exercises. Thus, unnecessary disruptions should be avoided, such as ringing cell phones, engagement in private conversations, and other unrelated activities. Cell phones, media players, or any noisy devices should be turned off during a class. Texting, web surfing, and posting to social media are generally not permitted. Laptop use may be permitted if it is used for taking notes or conducting class activities. Students should check with the instructor about permissible devices in class. IUPUI nurtures and promotes "a campus climate that seeks, values, and cultivates diversity in all of its forms and that provides conditions necessary for all campus community members to feel welcomed, supported, included, and valued" (IUPUI Strategic Initiative 9). IUPUI prohibits "discrimination against anyone for reasons of race, color, religion, national origin, sex, sexual orientation, marital status, age, disability, or veteran status" (Office of Equal Opportunity). Profanity or derogatory comments about the instructor, fellow students, invited speakers or other classroom visitors, or any members of the campus community shall not be tolerated. A violation of this rule shall result in a warning and, if the offense continues, possible disciplinary action.

3. **Communication:** For classroom-based courses, the instructor or teaching assistant should respond to emails by the end of the next class or, for online courses, within two Indiana University working days, which excludes weekends and holidays. The instructor should provide weekly office hours or accept appointments for face-to-face, telephone, or teleconferenced meetings, and announce periods of extended absence in advance.
4. **Counseling and Psychological Services (CAPS):** Students seeking counseling or other psychological services should contact the CAPS office at 274-2548 or capsindy@iupui.edu. For more information visit <http://life.iupui.edu/caps/>.
5. **Course evaluations:** Course evaluations provide vital information for improving the quality of courses and programs. Students are urged to complete one course and instructor evaluation for each section in which they are enrolled at the School of Informatics and Computing with the following exceptions: (a) The student has withdrawn from the course; (b) fewer than five students are enrolled in the section (in which case maintaining anonymity is difficult); and (c) the section is a laboratory that must be taken with a course having a different section number. Course evaluations are completed at <https://soic.iupui.edu/app/course-eval/>. Course evaluations are typically open from the eleventh week. Course evaluations are anonymous, which means that no one can view the name of the student completing the evaluation. In addition, no one can view the evaluation itself until after the instructor has submitted the final grades. In small sections, demographic information should be left blank, if it could be used to identify the student.
6. **Disabilities policy:** All qualified students enrolled in this course are entitled to reasonable accommodations for a disability. Notify the instructor during the first week of class of accommodations needed. Students requiring accommodations register with Adaptive Educational Services (AES) and complete the appropriate AES-issued before receiving accommodations. The AES office is located at UC 100, Taylor Hall (Email: aes@iupui.edu, Tel. 317 274-3241). For more information visit <http://aes.iupui.edu>.
7. **Email:** Indiana University uses your IU email account as an official means of communication, and students should check it daily. Although you may have your IU email forwarded to an outside email account, please email faculty and staff from your IU email account.
8. **Emergency preparedness:** Know what to do in an emergency so that you can protect yourself and others. For more information, visit the emergency management website at <http://protect.iu.edu/emergency>.
9. **IUPUI course policies:** A number of campus policies governing IUPUI courses may be found at the following link: http://registrar.iupui.edu/course_policies.html
10. **No class attendance without enrollment.** Only those who are officially enrolled in this course may attend class unless enrolled as an auditor or making up an Incomplete by prior arrangement with the instructor. This policy does not apply to those assisting a student with a documented disability, serving in an instructional role, or administrative personnel. <http://registrar.iupui.edu/official-enrollment-class-attendance.html> Children

may *not* attend class with their parents, guardians, or childcare providers.

11. **Religious holidays:** Students seeking accommodation for religious observances must submit a request form to the course instructor by the end of the second week of the semester. For information visit <http://registrar.iupui.edu/religious.html>.
12. **Right to revise:** The instructor reserves the right to make changes to this syllabus as necessary and, in such an event, will notify students of the changes immediately.
13. **Sexual misconduct:** IU does not tolerate sexual harassment or violence. For more information and resources, visit <http://stopsexualviolence.iu.edu/>.
14. **Student advocate:** The Student Advocate assists students with personal, financial, and academic issues. The Student Advocate is in the Campus Center, Suite 350, and may also be contacted at 317 274-4431 or studvoc@iupui.edu. For more information visit <http://studentaffairs.iupui.edu/advocate>.

MISSION STATEMENT

The Mission of IUPUI is to provide for its constituent's excellence in

- Teaching and Learning;
- Research, Scholarship, and Creative Activity; and
- Civic Engagement.

With each of these core activities characterized by

- Collaboration within and across disciplines and with the community;
- A commitment to ensuring diversity; and
- Pursuit of best practices.

IUPUI's mission is derived from and aligned with the principal components—Communities of Learning, Responsibilities of Excellence, Accountability and Best Practices—of Indiana University's Strategic Directions Charter.

STATEMENT OF VALUES

IUPUI values the commitment of students to learning; of faculty to the highest standards of teaching, scholarship, and service; and of staff to the highest standards of service. IUPUI recognizes students as partners in learning. IUPUI values the opportunities afforded by its location in Indiana's capital city and is committed to serving the needs of its community. Thus, IUPUI students, faculty, and staff are involved in the community, both to provide educational programs and patient care and to apply learning to community needs through service. As a leader in fostering collaborative relationships, IUPUI values collegiality, cooperation, creativity, innovation, and entrepreneurship as well as honesty, integrity, and support for open inquiry and dissemination of findings. IUPUI is committed to the personal and professional development of its students, faculty, and staff and to continuous improvement of its programs and services.